

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (currently amended) An integrated database system for performing query processing by combining a plurality of external databases, comprising:

a predicate dictionary including information on connections among predicates having similar meanings and usable in query description of query input into the integrated database system ~~used in the query processing~~ and on strengths of the connections; and

query expansion means for referring to the information of connections among predicates having similar meanings and the strength of the connections included in the predicate dictionary to convert a query, which is thrown into the integrated database system, into one or more query sets.

2. (original) An integrated database system according to claim 1, wherein, when the connections among predicates by which the query conversion can be performed exist in the predicate dictionary, the query conversion by the query expansion means referring to the predicate dictionary is repetitively applied.

3. (currently amended) An integrated database system according to claim 1, further comprising:

specification descriptions concerning query processing capabilities of the external databases; and

query extraction means, with ~~for~~ referring to the specification descriptions, for extracting to extract queries, which can be executed using the external databases, from the converted query set.

4. (currently amended) An integrated database system according to claim 1, further comprising query selection means, with ~~for~~ referring to the strengths of the connections, which are set in the predicate dictionary, for selecting to select an appropriate combination of queries from the converted query set.

5. (currently amended) An integrated database system ~~according to claim 4~~ for performing query processing by combining a plurality of external databases, comprising:

a predicate dictionary including information on connections among predicates used in the query processing and on strengths of the connections; and

query expansion means for referring to the connections among predicates and the strength of the connections included in the predicate dictionary to convert a query, which is thrown into the integrated database system, into one or more query sets query selection means for referring to the strengths of the connections, which are set in the predicate dictionary, to select an appropriate combination of queries from the converted query set,

wherein, when the query selection means selects queries, a lower limit of a approximation level and an upper limit of an execution cost both of which are specified in advance are referred.

6. (original) An integrated database system according to claim 1, further comprising query plan merging means for generating a query plan by merging the queries in the converted query set.

7. (currently amended) A program storage medium for storing a program which realizes an integrated database system for performing query processing by combining a plurality of external databases, the program storage medium storing:

a predicate dictionary including information on connections among predicates having similar meanings and usable in query description of query input into the integrated database system ~~used in the query processing~~ and on strengths of the connections; and

a program for realizing query expansion processing which refers to the predicate dictionary to convert a query, which is thrown into the integrated database system, into one or more query sets.

8. (new) An integrated database system for performing a query processing by combining a plurality of external database comprising:

a predicate dictionary including information on both connections and strengths of the connections between a predicate of a query input into the query processing system and other predicates having similar meaning with the predicate; and

query expansion means, with referring to the connections and strengths included in the predicate dictionary, for converting the query into one or more query set usable for the query processing including queries directed to one or more of the plurality of external database.

9. (new) The integrated database system of claim 8, a query conversion performed by the query expansion means is repeated in case that the connections among predicates by which the query conversion can be performed exist in the predicate dictionary.

10. (new) The integrated database system of claim 8, further comprising selecting means for selecting at least one appropriate predicate from the query set converted by the query expansion means.

11. (new) The integrated database system of claim 8, wherein the query expansion means converts the query into the query set with an approximation level defined according to an approximation rule which has been determined in advance.